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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,894	12/10/2003	Shoci Kobayashi	275834US6	8611

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

GOMA, TAWFIK A

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/733,894	Applicant(s) KOBAYASHI, SHOEI	
	Examiner Tawfik Goma	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heemskerk et al (US 6628584) in view of Sako et al (US 5901127).

Regarding claim 1, Heemskerk discloses a reproduction-only recording medium wherein blocks having a main data area and a linking area are continuous with each other (figs. 3-4 and col. 4 lines 53-67) to form a data track by embossed pits (fig. 1b). Heemskerk fails to disclose main data recorded in said main data area and linking data recorded in said linking area in each of said blocks are scrambled by scrambling data generated by an identical system. In the same field of endeavor, Sako discloses main data and linking data that are scrambled by an identical system (fig. 1 and col. 4 lines 27-32). It would have been obvious to one of ordinary skill in the art to modify the recording medium disclosed by Heemskerk by scrambling the main data and header information with an identical system as taught by Sako. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been

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motivated to scramble the data in order to randomize the data and remove the same patterns in the data string (col. 18 lines 5-11).

Regarding claim 2, Sako further discloses wherein said scrambling data is generated by a random sequence using address information of said block as an initial value (col. 6 lines 49-55).

Regarding claim 4, Sako further discloses wherein in each of said blocks, said linking area is formed on only a front end side of said main data area (fig. 7 and col. 6 lines 22-32). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide the linking area in front of the user data area in order to enable synchronization during random access prior to reading of the specified user data area.

Regarding claim 5, Heemskerk further discloses wherein in each of said blocks, said linking area is formed on only a rear end side of said main data area (fig. 3).

Regarding claim 6, Heemskerk discloses a reproducing apparatus for performing data reproduction in correspondence with at least a reproduction-only recording medium in which medium blocks having a main data area and a linking area are continuous with each other to form a data track by embossed pits (figs. 1b, 2 and 3). Heemskerk further discloses said reproducing apparatus comprising: reading means for reading information from a recording medium loaded into the reproducing apparatus (22, 27, fig. 2); and decoding means for subjecting the information read by said reading means to data decoding processing (col. 4 lines 30-33). Heemskerk fails to disclose wherein main data recorded in said main data area and linking data recorded in said linking area in each of said blocks are scrambled by scrambling data generated by an identical system, and subjecting the reproduced data to descrambling processing for said scramble, and reproducing said main data and said linking data. In the same

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field of endeavor, Sako discloses main data and linking data that are scrambled by an identical system (fig. 1 and col. 4 lines 27-32) and descrambling means for descrambling the data (fig. 22). It would have been obvious to one of ordinary skill in the art to modify the recording medium disclosed by Heemskerk by scrambling the main data and header information with an identical system and to descramble the reproduced scrambled data as taught by Sako. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to scramble the data in order to randomize the data and remove the same patterns in the data string (col. 18 lines 5-11).

Regarding claim 7, Sako further discloses wherein said decoding means subjects the information read by said reading means to said descrambling processing using scrambling data generated by a random sequence using address information of said block as an initial value (col. 6 lines 49-55).

Regarding claim 8, method claim 8 is drawn to the method of using the apparatus of claim 6, therefore method claim 8 is rejected for the same reasons of obviousness as applied above.

Regarding claim 9, Heemskerk discloses a disk manufacturing method for manufacturing a reproduction-only disk recording medium (figs. 1a, 1b and claims 5 and 11), in which medium blocks having a main data area and a linking area are continuous with each other as a data track formed by embossed pits (figs. 1b, and 3). Heemskerk further discloses performing mastering using the data (fig. 1b and col. 1 lines 17-22). Heemskerk fails to disclose the steps of: scrambling main data recorded in said main data area and linking data recorded in said linking area by using scrambling data generated by a random sequence using address information of

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said block as an initial value. In the same field of endeavor, Sako discloses main data and linking data that are scrambled (fig. 1 and col. 4 lines 27-32) using a random sequence using address information as an initial value (col. 6 lines 49-55). It would have been obvious to one of ordinary skill in the art to modify the recording medium disclosed by Heemskerk by scrambling the main data and header information as taught by Sako. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to scramble the data in order to randomize the data and remove the same patterns in the data string (col. 18 lines 5-11).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heemskerk et al (US 6628584) in view of Sako et al (US 5901127) as applied to claims 1-2, and 4-9 above, and further in view of Kobayashi et al (US 6256276).

Regarding claim 3, Heemskerk in view of Sako fail to disclose wherein in each of said blocks, said linking area is formed on a front end side and a rear end side of said main data area. In the same field of endeavor, Kobayashi discloses a linking areas in front and behind the main data. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the medium disclosed by Heemskerk in view of Sako by providing linking areas in front and behind the main data as taught by Kobayashi. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to provide the linking areas in front and behind the main data in order to make the read-only disc compatible with readers for recordable discs that have the front and back linking areas (see Heemskerk abstract).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


T. Goma
2/9/2007


THANG X. TRAN
PRIMARY EXAMINER